

REMARKS

In the Action, claims 12-29 are rejected. The pending claims in this application are claims 12-29, with claims 12 and 26 being independent. In view of the following comments, reconsideration and allowance are requested.

Rejections Under 35 U.S.C. § 103

Independent claim 12 is directed to a method of producing a foam element comprising the steps of placing a fleece with a ferromagnetic coating directly thereon facing and engaging a wall of a foam mold. The coating extends across the entire surface of the fleece facing the foam mold wall so that the fleece is able to conform to the contour of the mold. A magnetic field is produced to hold the ferromagnetic coating and the fleece in position on the wall of the foam mold during the molding step. The foam element is molded in the foam mold with the fleece on the mold wall so that the fleece becomes embedded in the foam body. The foam mold element is removed from the foam mold with the fleece embedded into a surface of the foam element as a barrier layer.

Claim 26 is directed to a foam element comprising a body of molded foam material and a barrier layer on one surface of the body. The barrier layer is a fleece with a ferromagnetic coating directly on and covering the entire surface of the fleece. The fleece is embedded into the surface of the body.

Forming the foam element in the manner recited in the claims provides an efficient and effective production process. The ferromagnetic coating on the fleece enables the fleece to conform to the shape of the mold body and to securely hold the fleece in place during the

molding process, which can then be separated from the mold. The fleece forms a permanent connection with the molded foam body by the foam material becoming embedded in the fleece. The fleece with its ferromagnetic coating provides a protective barrier layer on the foam element.

Claims 12, 18, 19, 21, 22 and 26-27 are rejected under 35 U.S.C. § 103(a) as being obvious over the alleged admitted prior art in view of U.S. Patent No. 5,286,431 to Banfield, JP 386102 to Harada and optionally JP 1152017 to Sugimoto. The alleged admitted prior art is cited for disclosing a method of forming a foam material by placing a barrier layer into a mold and foaming onto the back. The process discussed in the specification is relied on in the Action for disclosing that there is a danger of the fleece being displaced in the mold. However, this is a statement that the present invention recognizes the problem which is to be solved by the present invention. Moreover, this portion of the specification does not provide a solution for the problem and does not suggest the solution of the problem that is attained by the present invention.

The Banfield patent is cited for allegedly disclosing that it is well known to secure a barrier layer to a mold. Banfield is also cited for disclosing a method of producing a molded product in which the fastener has a fleece layer in which a ferromagnetic coating extends across the entire surface of the fastener. The ferromagnetic coating can comprise polyurethane ferromagnetic material. The fastener is placed against the mold wall producing a magnetic field to hold the fastener in place.

Banfield does not disclose a fleece that has a ferromagnetic coating. Banfield is relevant only to the extent that a hook and loop fastener is molded on a foam structure. The fastener includes a rigid base having hooks extending from one side. The hooks are encapsulated in a

removable elastomeric material that can contain iron particles. The iron particles are used to position the hook and loop fastener in the mold. The hook and loop fastener of Banfield is not a barrier layer for the foam. The base of Banfield is a support for the hooks and is not a barrier layer. Furthermore, the hooks are embedded into the elastomeric material so the face of the fastener having the hooks can be positioned against the mold wall. The elastomeric material must be removed from the hooks before the molded product can be used. The elastomeric material of Banfield is nothing more than an intermediate material that is separated from the final product and not a part of the final molded product. Thus, the magnetic material does not form part of the final foam product. Furthermore, the base of the fastener and the elastomeric material do not conform to the shape of the mold. Thus, the method and product of Banfield have no relation to the claimed invention.

Banfield provides no motivation or suggestion of applying a coating of a ferromagnetic material across the entire surface of a fleece or other flexible fabric type material. Banfield only provides a method of encapsulating hooks of a fastener in a removable/peelable material to prevent the hooks from being covered with the foam material. The magnetic material of Banfield is essentially a protective layer to prevent the foam from contacting the hooks during the molding process. The coating of Banfield must be removable to expose the hooks after the molding process so the hooks are recessed within the foam body as shown in Figure 7 and Figure 12 of Banfield. Since the magnetic coating of Banfield must be removable, it would not be obvious to one skilled in the art to use a magnetic coating on a fleece material as claimed in view of Banfield since the resulting coating would not be removable. Furthermore, Banfield uses the coating to encapsulate the hooks to support the hooks during molding, and thus, provides no

motivation to apply a coating to a fleece since the fleece does not require encapsulation for support during the molding step.

Harada and Sugimoto are cited for disclosing urethane foam and knitted fabric that is set in the mold. Harada does not suggest the use of a ferromagnetic coating on a fleece. Furthermore, it would not be obvious to modify Banfield by replacing the hooks and loop fastener with a knitted fabric. For the reasons discussed above, it would not be obvious to apply a magnetic coating to a knitted fabric of Harada and Sugimoto or a fleece of the present invention in view of Banfield.

In view of above comments, independent claims 12 and 26 are not obvious over the alleged admitted prior art in view of Banfield, Harada and Sugimoto. The claims depending from claims 12 and 26 are also not obvious for reciting additional features of the invention which in combination with the features of the independent claims are not disclosed or suggested in the art of record. For example, the combination of the cited art does not disclose applying the ferromagnetic coating to the fleece by a blade or nozzle and in claims 18 and 19, respectively, a spreadable ferromagnetic coating as in claim 21, conveying the fleece through a drier as in claim 22 in combination with the features of claim 12. The combination of the cited art also fails to disclose the ferromagnetic coating on a surface remote from the foam body as in claim 27, the surface of the barrier layer embedded in the foam free of the ferromagnetic coating as in claim 28, or the surface opposite the fleece being free of the ferromagnetic coating as in claim 29 in combination with the features of claim 26.

Claims 13-17 are rejected as being obvious over the alleged admitted prior art in view of Banfield, Harada, Sugimoto and further in view of EP 457226 to Von. The Von patent is cited

for the use of a polyester fleece. The claimed amount of polyester and the amount of the ferromagnetic coating are alleged to be obvious. However, no evidentiary basis or motivation is presented to support the proposed combination of using the Von fleece on a foam molded body. Also, no evidence teaches varying these amounts of polyester and ferromagnetic coating so that these features are not obvious.

The Action provides no basis for the position that the claimed ferromagnetic coating composition is obvious to one of ordinary skill in the art. The art of record does not disclose or suggest a composition including 80 parts polyurethane and 20 parts ferrite powder as in claims 15 and 16. The Action fails to establish prima facie obviousness where the art provides no suggestion of the coating composition. Accordingly, these claims are allowable over the art of record.

Claims 20 and 23-25 are rejected under 35 U.S.C. § 103 as being unpatentable over the alleged admitted prior art, Banfield, Harada, Sugimoto and further in view of U.S. Patent No. 2,909,442 to Persoon and U.S. Patent No. 3,497,411 to Chebiniak. The Action contends that it would be obvious to use ribbon transfer to apply the coatings as allegedly taught by Persoon and Chebiniak. However, the Persoon and Chebiniak patents are non-analogous to the making of the foam products of the alleged admitted prior art and the Banfield patent. Therefore it is not obvious to combine the teachings of these secondary references with the alleged admitted prior art and Banfield.

Claims 12, 18, 19, 21, 22, 26 and 27 are rejected under 35 U.S.C. § 103 as being unpatentable over the alleged admitted prior art (the substitute specification, page 2, paragraph 1) in view of the Banfield patent and the newly cited Japanese Patent No. 386102 to Harada. The

alleged admitted prior art is relied upon for a method of forming a foam padding seat with a barrier layer placed in the mold. In support of the rejection, it is alleged that a ferromagnetic coating, as allegedly taught by the Banfield patent, would be obvious to use on the alleged admitted prior art fleece. The use of a knife coater is allegedly taught in the Banfield patent. The use of a nozzle coating step is considered obvious. The Harada patent is cited for injection molding of foam resin onto a barrier layer.


However, as noted above, the Banfield patent only teaches a ferromagnetic coating on fastener hooks or loops, and not directly on a fleece layer. In failing to equate the Banfield fastener to the barrier layer of the alleged admitted prior art or the Harada patent, the rejection fails to present a prima facie case of obviousness.

Claims 13-17 also stand rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art, the Banfield and Harada patents, when further considered in view of the Von patent. Such claims are patentably distinguishable for the reasons advanced above.

Claims 20 and 23-35 stand rejected as being unpatentable over the admitted prior art, the Banfield, Harada, Persoon and Chebiniak patents. These claims are also not obvious and patentably distinguishable for the reasons advanced above.

In view of the foregoing, claims 12-29 are allowable. Prompt and favorable action is solicited.

Respectfully submitted,



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Dated: Nov. 29, 2004